

## Carrier element for ic module of chip card

Patent Number:  DE4431754

Publication date: 1995-11-23

Inventor(s): KIRSCHBAUER JOSEF DIPL ING (DE); MUNDIGL JOSEF DIPL ING (DE)

Applicant(s): SIEMENS AG (DE)

Requested Patent: CN1160449

Application Number: DE19944431754 19940906

Priority Number (s): DE19944431754 19940906

IPC Classification: G06K19/07; H05K3/32; H01L23/50

EC Classification: H01L23/31H2, H01L23/498K, G06K19/077M, G06K19/077T, H05K3/34C3B

Equivalents: CN1110771B,  EP0780005 (WO9607983), B1, ES2125649T, JP2785232B2, JP9512367T,  RU2124756,  WO9607983

---

### Abstract

---

A support element for mounting into a chip card has a semiconductor chip (2) arranged on a conductive substrate (1) and electrically connected to the contact lugs (5, 6; 5, 7) of the latter. At least the semiconductor chip (2) and the bonding wires (3) for connecting it to the contact lugs (5, 6; 5, 7) are surrounded by a plastic material (4) so that the contact lugs (5, 6; 5, 7) project out of the plastic material (4) and form a conductive connection to the semiconductor chip (2). The contact lugs on one of the surfaces of the plastic material (4) form contact surfaces (5). In addition, at least two contact lugs form extensions (6; 7) of the contact surfaces (5) for connecting to the ends of a coil antenna.

---

Data supplied from the esp@cenet database - I2

**PCT**  
WELTOORGANISATION FÜR C  
Internationale  
INTERNATIONALE ANMELDUNG VERÖFFENTLICHUNG  
INTERNATIONALE ZUSAMMENARBEIT AUF I

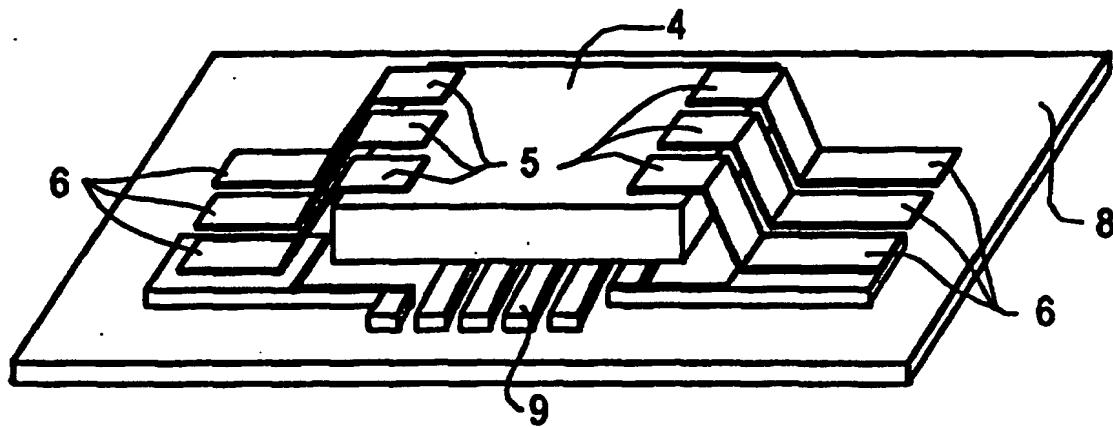


WO 9607983A1

(51) Internationale Patentklassifikation <sup>6</sup> :  G06K 19/077	A1	(11) Internationale Veröffentlichungsnummer: WO 96/07983  (43) Internationales Veröffentlichungsdatum: 14. März 1996 (14.03.96)
(21) Internationales Aktenzeichen: PCT/DE95/01200		(81) Bestimmungsstaaten: CN, JP, KR, RU, UA, US, europäisches Patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).
(22) Internationales Anmeldedatum: 5. September 1995 (05.09.95)		
(30) Prioritätsdaten: P 44 31 754.9 6. September 1994 (06.09.94) DE		Veröffentlicht <i>Mit internationalem Recherchenbericht.</i>
(71) Anmelder (für alle Bestimmungsstaaten ausser US): SIEMENS AKTIENGESELLSCHAFT [DE/DE]; Wittelsbacherplatz 2, D-80333 München (DE).		
(72) Erfinder; und		
(75) Erfinder/Anmelder (nur für US): MUNDIGL, Josef [DE/DE]; Talstrasse 16, D-93182 Duggendorf (DE). KIRSCHBAUER, Josef [DE/DE]; Föhrenweg 2, D-93476 Blaibach (DE).		

(54) Titel: SUPPORT ELEMENT

(54) Bezeichnung: TRÄGERELEMENT



(57) Abstract

A support element for mounting into a chip card has a semiconductor chip (2) arranged on a conductive substrate (1) and electrically connected to the contact lugs (5, 6; 5, 7) of the latter. At least the semiconductor chip (2) and the bonding wires (3) for connecting it to the contact lugs (5, 6; 5, 7) are surrounded by a plastic material (4) so that the contact lugs (5, 6; 5, 7) project out of the plastic material (4) and form a conductive connection to the semiconductor chip (2). The contact lugs on one of the surfaces of the plastic material (4) form contact surfaces (5). In addition, at least two contact lugs form extensions (6; 7) of the contact surfaces (5) for connecting to the ends of a coil antenna.